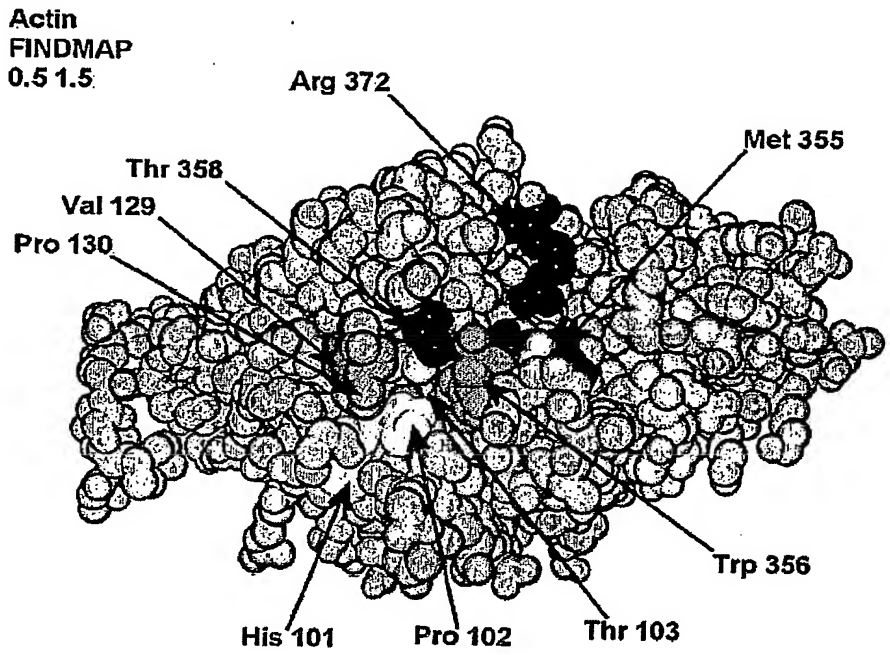
target residue

probe residue	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y	-
A	1	0	0	0	0	0.5	0	0	0.5	0	0	0	0.5	0	0	0.5	0.25	0	0	0	-1
C		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1
D			1	0.5	0	0	0	0	0	0	0	0.5	0	0.25	0	0	0	0	0	0	-1
E				1	0	0	0	0	0	0	0	0.25	0	0.5	0	0	0	0	0	0	-1
F					1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.25	0.5	-1
G						1	0	0	0	0	0	0.5	0.5	0	0	0.25	0.25	0	0	0	-1
H							1	0	0.25	0	0	0	0	0	0.25	0	0	0	0	0	-1
I								1	0	0.5	0.25	0	0	0	0	0	0	0.5	0	0	-1
K									1	0	0	0	0	0.5	0.5	0	0.5	0	0	0	-1
L										1	0.25	0	0	0	0	0	0	0.5	0	0	-1
M											1	0	0	0	0	0	0	0.25	0	0	-1
N												1	0	0.25	0	0	0	0	0	0	-1
P													1	0	0	0	0	0	0	0	-1
Q														1	0	0	0	0	0	0	-1
R															1	0	0	0	0	0	-1
S																1	0.5	0	0	0	-1
T																	1	0	0	0	-1
V																		1	0	0	-1
W																			1	0.25	-1
Y																				1	-1

FIGURE 1




```
DEDETTALVCDNGSGLVKA#################################################### 1-70

                                345                    12
                                HPT                    VP
#######################YNELRVAPEEHPTLLTEAPLNPKANREKMTQIMFETFNVPAMYVAIQAVL 71-140

SLYASGRTTGIVLDSGDGVTHNVPIYEGYALPHAIMRLDLAGRDLTDYL####################### 141-210

############################################################################ 211-280

#################################################APPERKYSVWIGGSILASLS 281-350

    76                  8
    MW                  R
TFQQMWITKQEYDEAGPSIVHR 351-372
```

FIGURE 2

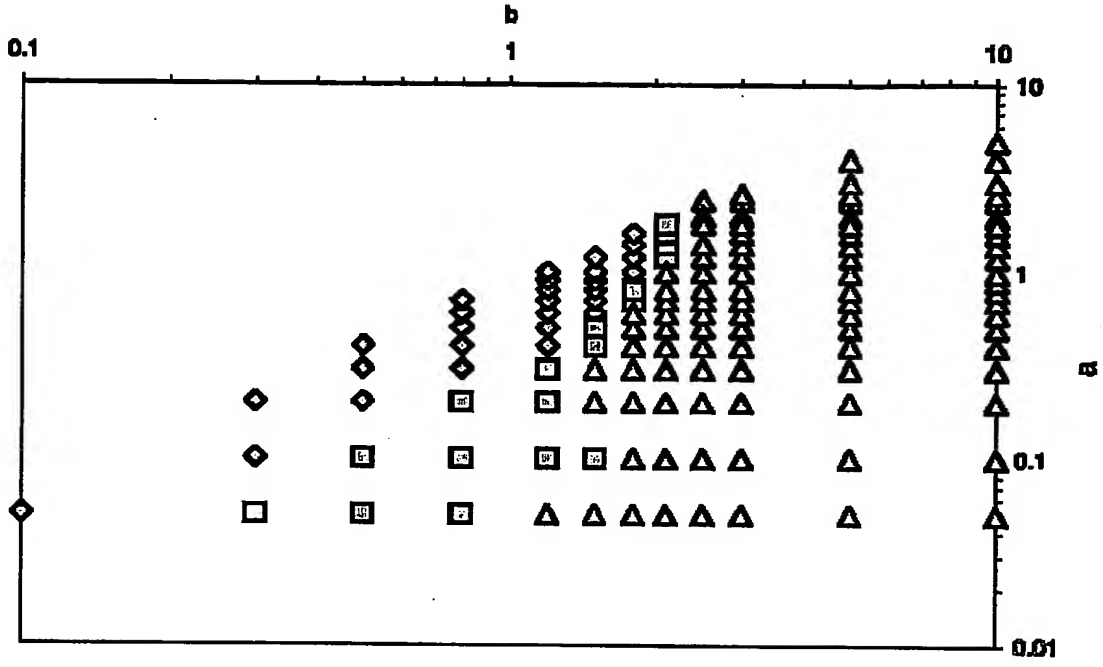


FIGURE 3

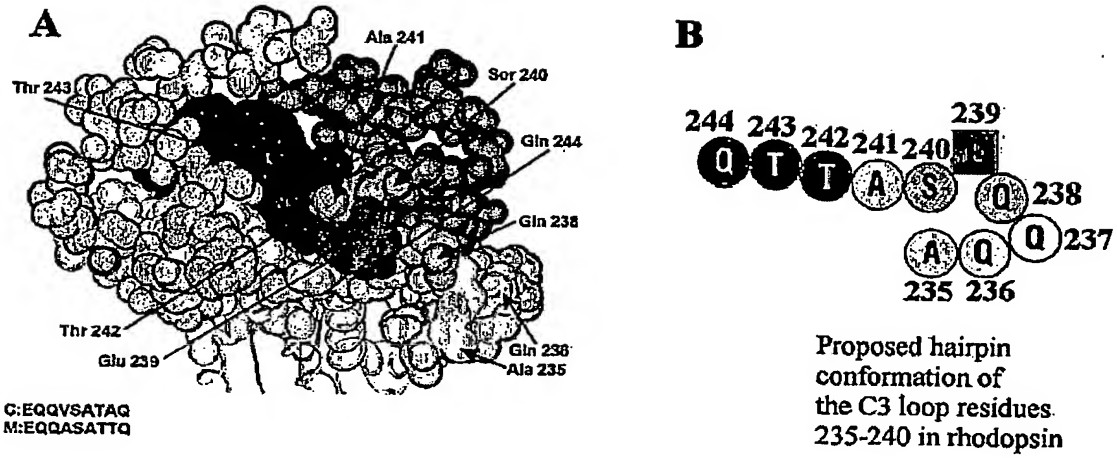

A
Ala 241
Ser 240
Thr 243
Gln 244
Gln 238
Thr 242
Glu 239
Gln 236
Ala 235
G:EQQVSATAQ
M:EQQASATTQ
B
244 243 242 241 240 239
Q T T A S E
Q 238
A Q Q 237
235 236
Proposed hairpin conformation of the C3 loop residues 235-240 in rhodopsin

FIGURE 4

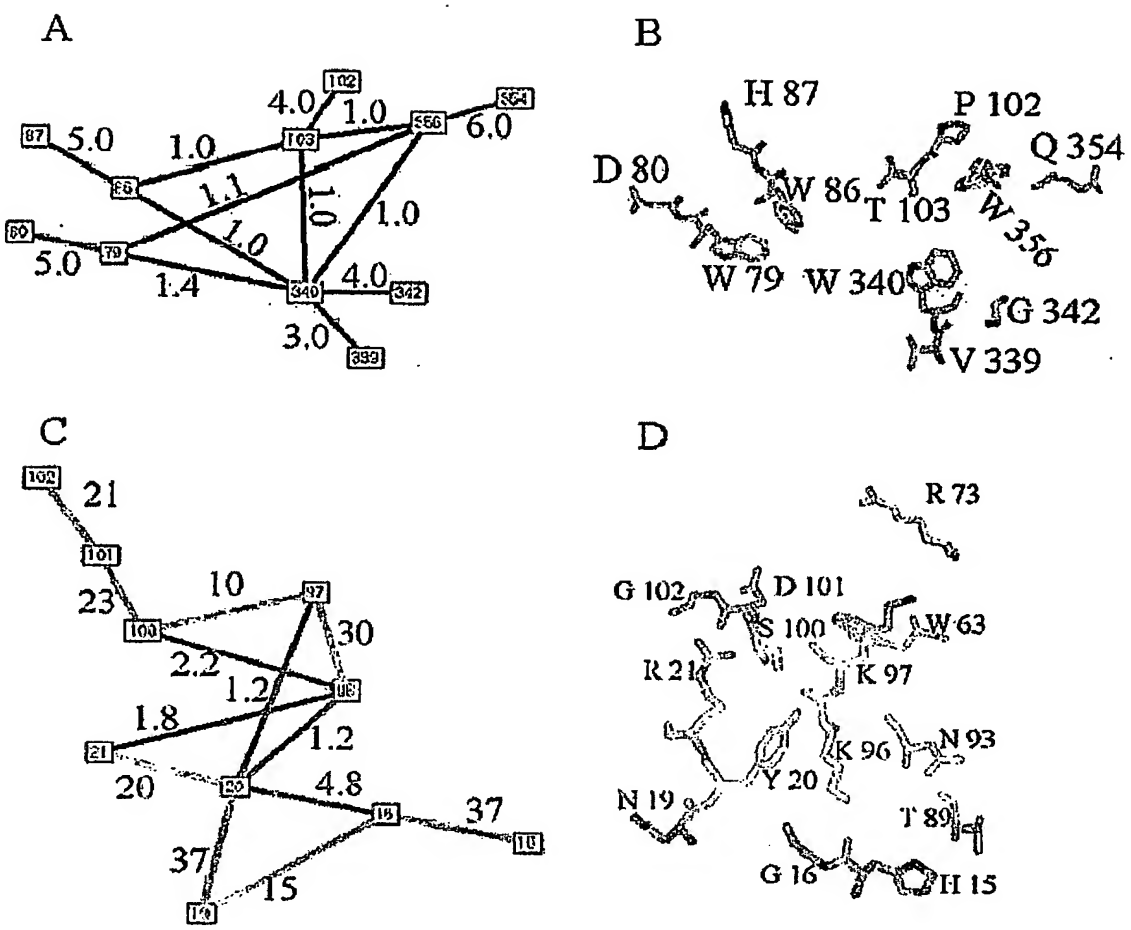

A
B
C
D
H 87
P 102
Q 354
D 80
W 86
T 103
W 79
W 340
G 342
V 339
R 73
G 102
D 101
S 100
W 63
K 97
K 96
N 93
Y 20
N 19
T 89
G 16
H 15

FIGURE 5